

The earliest years of television viewing are examined in a longitudinal study focusing on preschoolers' emerging abilities to organize the medium and the connections they make between its content and the rest of their experience.

The Preschool Television Viewer as Anthropologist

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As a naive viewer of television, the young child is faced with a formidable task—one reminiscent of the challenge confronted by an anthropologist visiting an exotic land. Like the anthropologist, the child beholds a novel, confusing world that she must attempt to unravel—in this case, the televised world of flickering images and sounds. With relatively little help from informants, he or she must examine these messages, classify them, and establish a meaningful organization. Moreover, young children must devise ways of relating their own experiences to the world contained within a box and separated by a glass screen. In the course of these “ethnographic” explorations, they must learn to make distinctions as well as to draw connections among various programs and

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characters. Children also must discover the rules that govern the world of television. Only such knowledge will permit prediction of when a show will begin or end, when a character will appear or disappear, when a program will invade their own world, and when it will transport them into the realm of fantasy and adventure.

But, unlike the anthropologist, the child has not had special training; thus her achievement in coming to understand the worlds transmitted by television is remarkable indeed. Very little is known about the ways in which the young child-anthropologist actually accomplishes this feat. Most studies dealing with children and television have focused on more circumscribed issues, such as children's attention to television (Alwitt and others, forthcoming; Levin and Anderson, 1976), the relationship between program comprehensibility and children's attention to formal features (Anderson and others, 1981; Watkins and others, 1980) or children's retention of specific types of programming (Collins and others, 1978; Newcomb and Collins, 1979). Nearly all adopting a cognitive-processing perspective, these specific investigations tend to be large-scale, laboratory, cross-sectional studies.

What follows is a description of a small-scale, naturalistic study in which three preschool children were observed at regular intervals for three years as they gradually made sense of the world encountered on television. We have deliberately cast our net widely, so that we can offer at least a preliminary impression of children's learning in a range of issues involved in decoding and processing television.

Our approach concentrated on two aspects of classification that permeate children's explorations of television. One fact that arose repeatedly is the child's discovery of boundaries—between television shows, between television and real life, and between television characters. The other involved the *types* of classifications generated by children; classification of single elements (as, for example, naming specific characters); more complex classifications where elements cluster to form groups (such as character-types—monsters, people, puppets); and, finally, the interaction among classes (such as characters of different classes interacting with and affecting each other's actions and feelings).

Though we expected that classification of the television world would develop along the lines specified in general classification research (see Jaglom and Gardner, 1981, and references cited therein), we were aware that television as a medium differs from physical objects and language. It presents an unusual set of stimuli, a conglomeration of distinct symbol systems including language, music, and movement, in a variety of visual forms, such as animation, puppets, and live-action. As a result, children's processing capacities may be challenged to a greater extent and in different ways by television than by traditional media.

Adding to the difficulty of decoding the televised world is the fact that television is a novel medium, so new, in fact, that our culture has not yet invented ways of teaching its structure to children. Therefore, even more so than with traditional media, the child is left to her own devices in making sense of television. Both its perplexity and novelty lead to the hypothesis that it offers a particularly daunting challenge to the young child's classificatory powers.

To provide some focus, we have organized our survey around four major issues, each of which could be approached in terms of the child's classificatory practices. These issues reflect our belief that in order to make sense of the world of television, the child first needs to recognize that this world consists of various types of programs with different themes, formats, and purposes. We approached this developing recognition by examining children's direct classification of various program types, as well as their changing program preferences. Central to the ability to classify and understand television is the ability to sort out and understand the relationships between its many characters. Accordingly, we focused considerable attention on character. Finally, to examine how children develop an understanding of the connection between television and their own lives, we examined all associations made by the children between the two worlds. A more complex description of the four issues follows.

1. *Children's Viewing Preferences.* In the early years, viewing preferences provide one line of insight into children's classification of the world of television. To prefer a program, a child must perceive it or at least some of its contents as distinct from others. Accordingly, we examined changes in children's general viewing repertoires, their preferences, and their dislikes.

2. *Program Boundaries, Distinctions, and Sequences.* Here, we explored children's understanding of the rules and boundaries governing the internal world of television. One part of our inquiry involved a systematic examination of children's abilities to draw distinctions and make connections between shows. Through sorting and classification tasks, we examined children's abilities to group television programming into five major adult-perceived categories—cartoons, commercials, news shows, adult shows, and children's shows. ("Sesame Street" constituted an additional category.) We conjectured that the more a child liked or was familiar with a program, the simpler and more consistent a program's format, and the more salient its formal features, the sooner the child would distinguish it.

The second part of our inquiry involved children's recognition of show beginnings and endings, their knowledge of scheduling, and their understanding of the boundaries between shows and the ability of characters to cross those boundaries.

3. *Television Characters.* Of interest here was the development of children's ability to identify, discuss, and describe television characters and their interactions. A six-category coding scale represented a proposed hierarchy of character description abilities. We hypothesized that children initially would identify characters simply by name, move to single trait descriptions based on external attributes or behaviors, and eventually progress toward more complex, multiple trait descriptions featuring internal, psychological traits. Finally, we expected an increasingly sophisticated ability to discuss interactions between characters and the effects of characters on each other's actions and behaviors.

4. *Television/Real Life Relationship.* Every child must identify elements that are common to both worlds, those that are different or exist only in one world, and those that overlap. Eleven types of television real life associations or statements about the relationship were identified in the data. These fell into two major categories: investigating similarities and investigating differences. We assumed that children would initially overlook the differences between the two worlds and progress toward an understanding of the fluctuating nature of the relationship between them. Specifically, television consists of some elements that correspond directly to the real world and others that are completely unrepresentative of reality and, in fact, contradict the world outside the screen.

The Study

Our subjects were three first born children from middle- and lower middle-class families living in suburbs of Boston. They belonged to high viewing households, where little regulation of viewing took place and the television was often on for most of the day. Subjects were two years old when the study began and five years old when data collection was completed.

Data were collected primarily during biweekly home visits. A variety of play materials were used to ascertain the child's competence in various skills relevant to the television medium, including the abilities to discriminate among program types, to relate television content to real life experience, to recognize and recall character names and attributes, and to sequence story material (Jaglom, Fagre, and Wilder, 1980; Jaglom, Wilder, and Fagre, 1979; Robinson, Jaglom, and Wilder, 1980; Vibbert, Jaglom, Gardner, and Wilder, 1980).

Tasks were designed to probe children's abilities in these various areas. For example, children were presented with photographs of television fare and asked to place together ones that belonged together or, sometimes more specifically, to put all the cartoons or commercials or news or kids' show photographs together. Another task consisted of a guessing game in which the child

and the experimenter alternated hiding television characters behind their backs, providing one another with clues regarding the character's attributes and guessing which character was hidden.

Symbolic play proved another revealing vehicle. The experimenter provided the necessary props for recreating a scene viewed on television, and the child's reenactment was then studied for its verisimilitude to the televised segment, as well as for the information it provided about the child's concept of characters, their prototypical behaviors, and the format or sequence of television content in general. During all visits, children's television program preferences were noted and one-half hour of the child's natural television viewing was observed.

A supplementary method of data collection consisted of presenting, on a quarterly basis, videotapes of various types of television fare. For these sessions, children were brought to the Harvard Media Center, where they were videotaped while televiewing in a comfortable setting. Administration of these tapes provided a systematic set of stimuli with which to determine changes in children's understanding of and reactions to the same television fare. All sessions, both home visits and videotape sessions, were recorded on an audio cassette tape recorder and verbatim transcripts were kept.

A final method of data collection relied on the parents' cooperative efforts as coresearchers. They participated in biweekly interviews with the experimenter, kept diaries of their children's television-related comments and experiences, and responded quarterly to questionnaires provided by the experimenter.

During the three years we conducted the study, we were able to follow each of the three children's unique style of television viewing. These styles are outlined here to provide a more complete picture of our subjects.

What may be termed the active style of TV viewing is represented by Kathy, for whom television is a social activity; it stimulates conversation, is shared with other people, and does not take precedence over surrounding stimuli. Kathy's parents are very involved with her viewing, monitoring it carefully and making a point of watching together and encouraging questions and discussions about the programs they see.

In contrast to Kathy, John is a quiet, absorbed viewer who needs no company while viewing. Additionally, John's parents rarely stimulate discussion about television content and do not monitor his viewing.

Finally, in the case of Donny, television viewing is treated as a secondary activity. More often than the other two children, he uses television as a backdrop against which to play. Television is neither a social activity (as with Kathy) nor as all-absorbing as it is for John. Donny's parents' attitudes also fall between those of the parents of the other two children, in that they do watch

with him and stimulate some discussion of television content but not to the extent of Kathy's parents.

Findings

Children's Viewing Preferences

In examining what children watch on television, we divided the data into several categories.

Repertoire. A record was kept of the number of times a show or type of show was mentioned in the child's data, thus providing a general idea of the frequency with which children watched different types of programming.

Preferences and Nonpreferences. Bits of data were scored in the preference category (one point) if a child or parent said that a child "enjoyed," "liked," "was particularly attracted to," or "loved" a show or if a show was labeled a child's "favorite." Bits were scored in the nonpreference category (one point) if a child or parent said a child "hated" or "disliked" a show.

Choice. Choice situations involved a child choosing one show over another, implying a preference for the chosen show relative to the unchosen show. Since this was only a relative preference, both the chosen show and the unchosen show were given scores of .5 in the preference and nonpreference categories respectively.

Attention. As a check for preference data, a record was kept of the number of times the experimenter observed extremely high or extremely low attention to specific shows shown during videotape sessions for each child.

Shows were grouped into eight major categories: "Sesame Street," children's shows (such as "Mister Rogers' Neighborhood," "Three Stooges"), cartoons (such as "Superfriends," "Flintstones"), action/adventure shows (such as "The Incredible Hulk," "Emergency"), situation comedies (such as "The Odd Couple," "Bewitched"), adult shows (such as talk shows), news, and commercials. Individual show preferences, nonpreferences, and choices were scored within these categories. Independent judges obtained 89 percent reliability on their scoring of half of all the data. (Details of scoring and results are available in Vibbert and others, 1980.)

We discerned a general pattern of television preferences in our children. "Sesame Street," cartoons, and other children's programs are watched consistently from age two on. In addition, children watch certain adult shows with their parents and consider these to be ones that they "like." Aside from these shows, which fall into the "watched with parents" category, children generally dislike adult programming, especially the news. At age three, situation

comedies and family programming emerge as favorites and, at age four, action-adventure shows begin to be watched and enjoyed.

Certain parental strictures and individual differences complicate this orderly picture, however. For example, Kathy consistently expressed a love for commercials. In addition, since she was not allowed to watch cartoons until into her fourth year, her preference for cartoons emerged late. Once she did begin watching them, her enthusiasm caught up to that of the boys. Further, although Kathy did watch and prefer animated action-adventure programming at age four, she never viewed live action-adventure programming (such as "Six Million Dollar Man" and "The Incredible Hulk") during the course of our study. Thus the television world that Kathy was exploring during each of the three years differed from that being viewed by the boys.

Even with the special constraints in Kathy's viewing, the children's viewing repertoire and preferences were remarkably similar by age five. Children's shows and "Sesame Street" were preferred first and therefore likely to be distinguished first. Animations then acquired an intrinsic interest, presumably due to their arresting graphic display and pace, and finally the children's preference shifted to more fantastic shows with narratives.

Program Boundaries, Distinctions, and Sequences

Emerging preferences for various types of television programming signal the beginning of a classification system for the confusing world of television. The children make the first classificatory step by recognizing individual shows. But, in addition to differentiating between specific shows, such as "Superfriends" and "The Flintstones," children must be able to draw connections between such shows in order to form larger categories such as cartoons. In addition to tracing the growth of this ability, we also addressed the intrinsic rules of the television world as they have been established by networks and production teams—that is, how shows usually begin and end or when they break for commercials.

We examined our data for all instances in which children attempted to classify or distinguish among types of television content. These instances occurred either spontaneously, in tasks involving direct questions, or in tasks asking children to sort piles of television photographs into specific groups. Data were grouped according to the specific categories used by adults: cartoons, advertisements, news, shows designed for adults, shows designed for children, and the subcategory of "Sesame Street." (The latter was included because many first attempts at classification revolved around the identification of "Sesame Street" segments.)

Data were examined at six-month intervals. First, drawing on our classification tasks, we examined the age at which each of the children mastered the adult-perceived program categories as well as the average age of mastery across all three children. Next, we noted the process by which these categories were created, children's recognition of show beginnings, endings, and interruptions, knowledge of show scheduling, understanding of character-show connections, and use of various cues in classifying the television world.

Children's abilities to group shows into categories were traced using strict definitions of program types. These types were defined by their content and purpose independent of their visual appearance and formats. For example, an animated advertisement may look like a cartoon, but its content indicates that it is an advertisement as well. Conversely, cartoons and other children's programs often share the same intent but differ in form. That two program types can share either form or purpose and thus be classified in two ways is an understandable source of confusion for children. Items indicating such confusion were labeled *duals*. A response was considered *incorrect* when any part of a statement or action violated the commonly accepted definition of a category, *correct* when it corresponded to the commonly accepted notion of that category, *dual correct* when children focused on the content of a show rather than, or in conjunction with, its visual appearance (as, for example, an animated advertisement that was an advertisement even though it looked like a cartoon), and *dual incorrect* when the visual appearance of the show or show characters took precedence over content (for example, the perception that when Flip Wilson or Fonzie was on "Sesame Street," it was not "Sesame Street").

The child received credit for category recognition when judgments about this category were consistently greater than 75 percent correct. Independent judges obtained reliability of 92 percent in the correct, incorrect, and dual assignment of items.

The six-months' interval during which each child began to distinguish each category correctly more than 75 percent of the time is presented in Table 1. Also noted is the average six-month interval across all three children during which each category was distinguished correctly.

When the three ages of acquisition are averaged (3:0-3:6), advertisements constitute the first category acquired. In light of our preference data, this finding was not anticipated. Advertisements were not preferred by two of the three children, and the only child who expressed a consistent love of commercials was late in her acquisition of this category.

There are several possible explanations of this unanticipated finding. First, unless they watch only public broadcasting, all children are exposed to countless commercials, and those that are broadcast during children's pro-

Table 1. Category Acquisition

<i>Category</i>	<i>John</i>	<i>Kathy</i>	<i>Age of Acquisition Donny</i>	<i>Average</i>
Advertisements	2:0-2:6	3:7-3:11	3:7-3:11	3:0-3:6
Cartoons	2:7-2:11	4:0-4:6	3:7-3:11	3:7-3:11 (early in interval)
"Sesame Street"	4:0-4:6	3:0-3:6	4:0-4:6	3:7-3:11 (late in interval)
News	3:7-3:11	4:7-4:11	4:0-4:6 ^a	4:0-4:6
Children's Shows	4:7-4:11	4:0-4:6	4:0-4:6	4:0-4:6 (late in interval)
Adult Shows	4:7-4:11	4:0-4:6	uncountable	4:0-4:6

^aAlthough Donny obtained 75 percent during this interval, he exhibited confusion between news shows and ads during the 4:7-4:11 interval.

gramming are designed expressly to appeal to them. Alternatively, given young children's erratic attention to television, the fast pace and short length of commercials may capture their attention just as their overall format may serve to distinguish them from other shows. A final possibility is that the disruptive nature of commercials, the fact that they interrupt shows and cause favorite characters to disappear from the screen, may heighten their distinguishability.

Consistent with our expectations, cartoons and "Sesame Street" are the next categories acquired (3:7-3:11). Cartoons are grouped in a category first, perhaps because they comprise a larger percentage of viewing time and children are therefore more familiar with them. Another explanation may be their visual appearance, which differs radically from that of other shows. Conversely, "Sesame Street's" magazine format, incorporating many segments with diverse visual features and character types, may comprise a superordinate category that proves more elusive to young children.

The categories of children's shows and adult shows are acquired late (4:0-4:6). Again, this was not readily predictable from our preference data. Children's shows that are preferred are not classified any earlier than adult shows that are disliked. Perhaps these categories can also be considered superordinate categories, since both contain a wide range of shows designed for children or for adults and lack core defining features. Another complication is that children have their own definition of children's shows—namely, shows that

they watch—and they adhere to this definition regardless of the age group for which a show is intended.

Since children were so consistent in their dislike of news, one might assume that subjects must have distinguished the news from other shows in order to be so consistent. When shown pictures of various types of programming, however, four-year-old children often could not identify the news. Perhaps children were so quick to turn away from the screen when the news came on that they failed to absorb its format or identifying features. This possibility is supported by the fact that children were unable to describe the purpose of the news or to explain its relationship to the real world until 4:5.

Turning to children's understanding of the temporal organization of the television world, we found the two-year-olds' conception to be quite undeveloped. Youngsters believe that shows are continuously available, or "on all day," and they do not recognize beginnings or endings. They request shows at the wrong time and ask their parents to replay shows they enjoy. Children of this age do begin to master the sequence in which their favorite shows appear, but this knowledge is extremely limited. Children will make statements like, "Oh, 'Soap,' then 'Sesame Street,' then Big Bird, then Grover, then everybody else." As is evident in this example, television characters play a major organizing role in two year olds' conception of this world and their ability to differentiate between its various shows, but their conception is confused indeed. For instance, the disappearance of characters from the screen causes great consternation, and children reassure themselves with phrases like, "They'll be right back." Characters (like shows) are thought to be available upon request. They are perceived as independent of their shows, appearing potentially at any time on any channel.

At age three, children continue to cling to the notion that their favorite shows are available at their whim. They still request shows indiscriminately and react to characters' disappearance with, "Hey, where'd they go?" They do, however, begin to grapple with some of these rules, recognizing beginnings and endings of favorite shows by means of identifiable cues such as theme songs, and they expand their knowledge of schedules by associating particular shows with general times of day. Concurrently, characters are perceived as belonging to specific programs.

During their fifth year, children display far more knowledge of television scheduling. They distinguish between shows which are on every day (such as "The Flintstones"), those on irregularly (such as sports), and specials (such as "Peanuts") that replace regularly scheduled shows. In addition, they can state the specific days and broadcast times for many shows and recognize show beginnings and endings consistently. The set of cues used for such recognition has expanded to include logos, station signals, and credits and adver-

tisements in addition to theme songs. Along with this new understanding of television's internal structure, children persist in their conviction that a character may appear on *only one show*. Unaware of the technology that allows for guest appearances by characters from different shows, children adhere to their newly formed organizational rules. They are hesitant to acknowledge exceptions and therefore deny the possibility that characters cross show boundaries. Thus, although five-year-old children have made vast strides in distinguishing the kinds of shows on television and the rules governing the scheduling of those shows, certain confusions remain.

Television Characters

In addition to establishing categories for television shows, children conduct an analogous sorting of its characters. Just as the anthropologist must learn to describe the various members of a foreign society and to understand the roles they play, the naive television viewer must learn to understand and describe various television personalities. In order to discuss the world of television intelligently, the child must learn to identify characters by name, describe their appearance, associate them with other characters, shows, or channels, discuss their behaviors, infer their personalities, and recognize their relationship to or influences on other characters.

As mentioned earlier, we hypothesized that, in discerning the boundaries between television characters, children would progress through three types of classification: first, simply distinguishing between characters and separating them into individual elements of the television world; second, progressing to more complex types of classifications in which connections are drawn between the individual characters; and, finally, appreciating the relationships between these more complex classes of characters. These three types, *distinct*, *linked*, and *interrelated*, represent three conceptual levels of character understanding.

Additionally we expected that, in discussing characters, children would initially be concerned with single, external features, only gradually acquiring the ability to perceive and discuss multiple character attributes, interpersonal characteristics, and more abstract, internal traits (Flapan, 1968; Selman, 1980). Although this last conceptual level is quite advanced for a five-year-old, we hypothesized that in view of numerous repetitions of television character presentations, our five-year-olds might reach this level of understanding.

The 1,157 character references made by the children during our three-year study were coded in terms of the following six categories: (1) *Identification*—naming characters; (2) *Appearance*—describing physical traits such as size, color, clothing, and body parts; (3) *Associations*—linking characters to objects,

surroundings, shows, channels, times of day, or other characters; (4) *Behavioral Attributes* — discussing characters' actions or abilities; (5) *Psychological Attributes* — referring to characters' internal disposition, emotional state, thoughts, or motives; (6) *Interactions* — referring to more than one character and perspective.

In addition to these major categories, we coded character references for subcategories reflecting further differences in levels of sophistication. For example, the Behavioral and Psychological Attributes categories included subcategories such as *single traits* (for example, "Cookie Monster nice") and *multiple traits* (for example, "Mighty Mouse flies up *and* saves the day").

Subcategories within the Interactions category included, for example: *one-way action*, where one character is the object of another's action ("Oscar yelled at Mr. Hooper to open the store"); *reaction*, where one character is the stimulus for another's behavior ("Oscar is laughing because Big Bird dropped his ice cream"); and *reciprocal action*, where a relationship is noted between two characters in which each affects the other ("Bert is mad at Ernie because he's trying to sleep and Ernie doesn't let him").

Independent judges obtained 89 percent reliability when scoring one-quarter of all the character data. Chi Squares were used to determine which categories and subcategories were used most frequently by each of the children at different ages. As detailed results have been reported elsewhere (Robinson, Jaglom, and Wilder, 1980), we will focus here on the developmental trends in children's understanding and discussion of television characters.

Two to Three Years. The two-year-olds were concerned primarily with naming the television characters to whom they were exposed. They encountered considerable problems, most often confusing characters who were similar in visual appearance and mixing the character's name with the name of the show. Nonetheless, children apparently explore their developing naming abilities in order to help them establish the numerous characters in the television world as separate, discrete entities.

Two-year-olds are also interested in the physical appearance of the various characters. When describing appearances, however, children fix on single, external attributes, without integrating them into an overall picture of the character. In addition, children concern themselves with the surroundings in which each character customarily appears. Thus, the two-year-old's conception of characters focuses on what they are called, what they look like, and where they are found.

Three to Four Years. At age three, the child's focus shifts somewhat from external, static names and appearances to more abstract and elusive behavioral and psychological attributes. She becomes interested in what characters do, what kind of people they are, and how they feel. The child begins by stating one trait at a time without attempting to combine them to form a more

complete character description. Gradually, between the ages of three and four, there emerges an increased ability to discuss several behaviors or traits simultaneously. Although the use of single traits predominates through all three years of the study, children's use of multiple and elaborated traits continues to increase from age three, signaling a more complex conception of television personalities.

Additionally, children begin at this age to make character-to-character associations, mentioning one character as another's friend or stating that two characters go together. They begin to describe interactions between characters, but their descriptions are limited to one-way actions and reactions subcategories. Children demonstrate an awareness that characters "do things together" but seem unaware of the influence one character's actions or feelings may have on the other's. The three-year-old is beginning to shift from drawing distinctions and perceiving characters as unidimensional, to forging links or connections between them and perceiving characters as complex and multidimensional.

Four to Five Years. Children begin to effect more links between characters and to describe them in terms of their many physical, behavioral, and psychological characteristics. The various attributes, actions, and facets of a character's personality are integrated into all-encompassing labels such as *monster*, *boy*, *person*, or *puppet*. The classification system with which children organize the television world expands to include more subdivisions for grouping individual characters.

In addition to using this increasingly sophisticated classification system, four-year-olds also approach character interactions with a new awareness of the circular or reciprocal action-reaction dynamic between the two participants in the interactions. Not only do two characters "do things together" but they do things *to* each other, thereby affecting each other's behaviors and feelings. The three-year-old says, "Ernie is waking up Bert" (one-way action) or "Bert woke up because Ernie made noise" (reaction)—demonstrating that Ernie's action affects Bert. In contrast, the five-year-old says, "Bert is mad at Ernie because he's trying to sleep and Ernie isn't letting him," communicating an understanding of the fact that Ernie's action affects Bert and causes a reaction to Ernie's action.

The fact that children as young as five are able to discuss psychological attributes and interactions is surprising, given our knowledge of preschoolers' difficulty with taking a perspective or understanding interpersonal relationships. The stereotypical and repetitive nature of television characters' behaviors and interactions appears to account for this precocious awareness of abstract traits.

The world of television has been organized quite successfully by age

five. Children's systems of organization include individual shows as well as groups of show types classified in terms of visual format, target audience, scheduling, and purpose. Their system also includes individual characters who are linked primarily to individual shows, as well as character types that are grouped according to physical appearance, shows, behaviors, psychological characteristics, and their interactions with one another.

Television/Real Life Relationship

Anthropologists, attempting to make sense of an exotic world, constantly draw comparisons with the society they know best—their own. Similarly, newcomers to the world of television find themselves drawn to comparisons, similarities, and contrasts between their own daily experience and what they view on television. The child is faced with the task of determining which elements of television relate directly to the real world (as, for example, news shows), which are fantastic and exist only in the world of television (for example, monsters), and which combine both real and fantastic elements (for example, talking horses). Once again, we find that children must begin by recognizing the individual elements comprising the television world. They must then classify them in terms of (1) those elements that are similar on television and in real life; (2) those that are different; and (3) those that are similar in some respects and different in others.

Instances in which the children in our study related television content to real life experience and real life experience to television content were grouped into descriptive categories characterizing the nature of their statements. The associations were first classified in terms of their directionality. An association made while viewing, from the television to the real world, was labeled a *television/real life* (hereafter TV-RL) *association*. An association made in the context of daily experience and related to content previously viewed on television was labeled a *real life/television* (hereafter RL-TV) *association*. Two major types of associations were established: *investigating similarities* and *investigating differences*. Within these major categories were several subcategories. For example, in investigating similarities children made the following kinds of associations:

1. Overgeneralizations indicating a belief that televised events are identical to, and have immediate and direct influence upon, the child's own life and, concurrently, that the child can directly influence televised events;
2. Statements of similarity that link an object, event, or character in one world to a similar one in the other;
3. Applications of information gained in one realm to similar situations in the other;

4. Imitation or reproduction of television situations;
5. Identification with television characters;
6. Requests made for televised objects that indicate an understanding that those objects exist and are available in the real world; and
7. Statements of representation that recognize the fact that television programming sometimes presents or provides information about the real world.

When differences between the realms of real life and television were investigated, children were found to make the following associations:

1. Statements of differences indicating that some characters or situations exist only on television and are not available in the real world;
2. Questions about differences that explore the relationship between television and daily experience or seek to clarify uncertainty about this relationship;
3. Statements of similarities and differences in which similarities between situations or people in the two worlds are recognized at the same time as discrepancies between those situations or people; and
4. Overdifferentiations that overlook all similarities and insist that nothing on television is real or relates to the real world.

For each of the three years of the study, the frequency of occurrence of a particular association type or subcategory was computed as a percentage of the total number of that type of association made across all three years (Jaglom, Wilder, and Fagre, 1979). For example, 72 percent of all overgeneralizations occurred from age 2:0 to age 2:11, while only 12 percent occurred between ages 3:0 and 3:11, and 16 percent occurred between 4:0 and 4:11. Table 2 summarizes the ages at which each of the eleven types of association types was used by the three children.

Our findings show that children are actively and consistently concerned with both the similarities and the differences between television content and daily experience during the preschool years. From the start, children are aware that some correspondence exists between the two worlds and that, in exploring the world of television, certain aspects of the real world may prove useful. Children of this age are also aware of instances marked by a lack of correspondence between the two worlds; they realize that, in the real world, what they see on television may exist in a different form or may not exist at all. We see an active and continuing effort to sort out the various contents of television and to relate them to information known in the real world. In Piaget's terms, there are perpetual efforts to assimilate televised information to daily experience or, alternatively, to accommodate televised information to knowledge gained in the real world.

Nonetheless, though young children have begun to distinguish real and

Table 2. Summary of Association Trends

2-3 Years	3-4 Years	4-5 Years
<i>TV/Real Life</i> Overgeneralizations Identification Applications		
Requests Imitation Similarity statements Difference statements Difference questions		Similarities and differences Statements of representation Overdifferentiation
<i>Real Life/TV</i> Overgeneralizations Similarity statements Applications	Identification Imitation Statement of representation Difference question	Requests Difference statements Overdifferentiation

fantastic elements of television, they remain confused about the actual relationship between events and objects that exist both on television and in daily life. This confusion is exemplified by the overgeneralizations that characterize this age. Children indicate a belief that the two spheres are identical, not separate and self-contained. If an egg breaks on television, they run to get a paper towel to clean it up, and they have trouble falling asleep because they believe the monster seen on television is in their room. The glass screen separating the television from the real world is forgotten. Television's status as a world unto itself has not been established fully in the child's mind.

At the same time, however, children appear to be testing their belief that the two worlds are identical by assuming the roles of television characters. They make statements such as the one that one boy made to his mother: "The boy yelled at him, and when I get big I'm going to yell at you" (2:5). They seem to be determining whether they can take on some of the characteristics of

television personalities or whether the boundary between the two worlds is too rigid and the characters totally unreal. In sum, the child between the ages of two and three is aware of a boundary separating television content from actual life experience, but she has not assimilated the fact that this boundary eliminates any possibility of immediate physical proximity between the two worlds.

By age three, although some fears of television content persist and may even magnify, children have, for the most part, realized that events or characters on television cannot immediately affect them and that they cannot influence events portrayed on the screen. Overgeneralizations fade; the two worlds are perceived as distinct; the lack of immediate, direct, total correspondence between the two worlds has been recognized. At this age children also begin to make statements indicating identification with television personalities and to imitate television characters *outside* the television context. They discover that some similarities exist between television and their own lives or personalities, that some characteristics may exist or be reproduced in the real world, but that others are fantastic and unique to the world of television. They will role-play scenes from "Superman" yet acknowledge the fact that Superman flies on television while real people do not. The absence of a direct stimulus may explain why these types of statements and role modelings cluster a year later for RL-TV associations than for TV-RL associations. Without television as a direct stimulus, the child must internalize character roles and personalities in order to emulate their behaviors. Such internalization, requiring considerable mental representation, seems a more sophisticated function than simply copying behaviors off the screen.

At age four, children begin perceiving subtleties in the relationship between television and daily experience. They take the third step in our sequence and detect the ways in which the two worlds actually relate, how the similar *and* different elements combine and how content in one realm may have influence on, or apply to, the corresponding content in the other realm. Thus, one four-year-old recognized a news segment on television as a description of a fire that actually took place in his town and was discussed in his class at school; another watched the weather every morning to determine what to wear that day. These more sophisticated perceptions are indicated by the appearance of statements foregrounding both similarities *and* differences and statements of representation.

At the same time, however, a new problem arises for children at age four. They have developed a rule with which they override this newly acquired understanding of the complex relationship between the two worlds: "Nothing on television is real," regardless of the extent to which it parallels real life. For example, a child seeing himself and his father on television says that neither of them are real people because they are on television. The appearance of over-

differentiation at age four and a half indicates first, that the four-year-old's definition of the word *real* differs from that of an adult and, second, that this definition involves the awareness of a boundary that radically separates television from a mundane perception of reality and the real world. At least in a sense there is an apparent regression. From the third classification step, in which they recognize the links and interrelationships between individual elements of the two worlds, children return to the first step, focusing solely on the separateness or distinctions between the individual aspects of television and real life.

Conclusion

Returning to the opening metaphor of this chapter, in which we compared the naive television viewer to an anthropologist embarking on the study of a strange culture, let us consider how our various entry points fit together into a coherent picture of the child's emerging competence with the medium of television.

The Nascent Anthropologist: Individual Elements and Lack of Boundaries

The two-year-old encountering the world of television for the first time is just beginning to test his or her anthropological wings. Although other children's shows and even some adult shows pass before their eyes, two-year-olds watch and enjoy "Sesame Street" and cartoons the most. Yet, even so, they are unable to identify these types of shows with much consistency. Nor are they able to identify reliably the characters appearing on these shows. Although two-year-olds know what they like while watching it, they have not established any categories for these shows and are unable to group together examples of a certain show type. While they make valiant efforts at identifying and describing the appearance and immediate surroundings of television characters, these descriptions remain limited to one character and one attribute at a time.

To the eye of the two-year-old, television is a world without order and without boundaries. The internal structure and intrinsic rules of the television world escape preschoolers, and they have not yet learned to impose an organizational structure or classificatory scheme of their own. In addition to lacking categories in which to group show types, they do not perceive any internal boundaries between shows. Characters are believed to appear on any channel at any time, floating freely throughout television land.

At two years, children have no conception that television shows are broadcast according to strict schedules controlled by networks and production

teams. Youngsters assume that their parents can control the world inside that box and persistently ask that their favorite shows be put on. Events occurring on television are believed to be physically related to, and influenced by, events in the child's own home. Although the child has begun to consider the issues of television's reality and the boundaries distinguishing it from daily experience, television's "untouchable" status has not yet been established.

*The Novice Anthropologist: Classes of Elements
and the Formation of Boundaries*

By the time they reach the age of three, children's skills in exploring the world of television have expanded considerably. Youngsters have been exposed to more types of programming and express preferences for situation comedies and family fare as well as for cartoons and "Sesame Street." These new preferences indicate added distinctions between individual television shows. Proceeding to the second step of the classification sequence, children have begun to impose their own organization, forming categories in which to group shows with similar characteristics or formal features. Thus, during this year children begin to group and identify advertisements, cartoons, and "Sesame Street."

Children also progress in their abilities to describe characters, moving from single, external trait descriptions to descriptions linking several traits at a time. Additionally, they combine external, obvious traits with more abstract and internal ones. In their fourth year, children begin to discuss interactions between characters and indicate an awareness that one character's actions may cause a reaction in the other. Although limited, this awareness indicates a movement towards the third step in the classification sequence—the perception of the overlap and interinfluence among various classes or groups.

In conjunction with their gains in organizing elements of the television world, children also enhance their understanding of the internal, intrinsic structure of this world. Although still reluctant to relinquish the belief that shows can appear on command, children begin to associate shows with times as well as to recognize beginnings and endings. The boundaries between successive shows are established and characters are believed to respect these boundaries. Indeed, linked to specific shows, characters are perceived as unable to appear on any others. The three-year-old's conception of the relationship between television and the real world largely corresponds to the second step of the classification sequence. An overall distinction is made between the medium and the real world, a boundary is formed and the lack of direct and immediate interchange between the worlds is established. Furthermore, the child recognizes and groups together those elements of television content that are similar to elements existing in her own world and those elements that

are different from and do not exist in reality. These two groups are seen as completely separate from one another.

The Competent Anthropologist: Overlap and Interrelation of Classes

By the fifth year, children have added action-adventure fare to their preferred or distinguished individual shows. To their initial battery of categories they now add the news, adult, and children's shows.

Children's descriptions of characters now come to integrate the many facets of their appearances, behaviors, and personalities into groups with such labels as *monsters* or *puppets*. Characters are seen as the combination of many traits, some of which may at times contradict each other. During this year, the third classificatory step is realized in character descriptions as children begin discussing the bidimensionality of character interactions. Children recognize that characters are separate individuals belonging to a variety of classes, that one character's behavior or feelings influences another's, and that this influence can trigger a whole new series of interactions that will affect *both* characters.

Children's understanding of the rules governing the television world progresses as well. Television schedules are memorized and specific broadcast times are learned. Many cues for show beginnings and endings are identified and used correctly. These schedules and show boundaries are seen as corresponding not only to specific shows but, rather, as overlapping and applying to all television shows, regardless of the category in which they fall. These rules provide a superstructure for the newly learned and imposed organization of the inner world of television.

Children's understanding of the relationship between television and real life also progresses from the second to the third classificatory step. Not only have children established groups of elements that correspond to both the real and televised worlds, as contrasted to groups that exist only in the world of television, but they have also recognized areas of similarity and difference that obtain between television and real life characters.

Agenda for the Future

Remarkable progress has been made by our preschoolers in each of the areas of television understanding examined here. As their ability to classify continues to develop, however, and as this meshes with greater understanding of the nature of the medium, further steps will be made and an even more sophisticated classification system will evolve. First, preferences will expand so that children will be exposed to an increasingly varied television diet. They

will learn to make ever finer distinctions among show types, distinguishing between shows *designed to* make people laugh (comedies), those designed to frighten (thrillers), those designed to teach (educational shows and documentaries), and those designed to entertain (serials, dramas, and so forth). Children can also be expected to become more flexible in their perception of these categories, to recognize that certain programs may fall into more than one category, and that exceptions to the definitions of categories exist. Additionally, greater knowledge of the technology behind television will be acquired, permitting a better comprehension of the flexible link between characters and their shows.

As children advance further in their understanding of characters and their interactions, they demonstrate a greater ability to describe the complex dynamics of these interactions and their effects on the behavior patterns, inner feelings, and motives of the participants. Descriptions of interactions expand to include more than two personalities at a time, and an understanding of the far-reaching consequences of one character's behaviors on many others is attained.

In addition, children develop the ability to make some sophisticated distinctions between reality and fantasy as they acquire an awareness of varying levels of reality, including the contrast between surface reality and an underlying psychological one.

The challenge for the ultimate mastery of television remains formidable. All the same, our young anthropologists have traveled a long way from their initial perception of television as an extension of real life and as an amalgam of confusing images. Their attainments are so impressive that they might be the envy of the most highly educated anthropologist on the eve of his or her first trip to the field.

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